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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/224,376	12/31/1998	JOSEPH C. HARVELL	709000	3762

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EXAMINER

CHANG, JUNGWON

ART UNIT	PAPER NUMBER
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2154

18

DATE MAILED: 11/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/224,376

Applicant(s)

HARVELL, JOSEPH C.

Examiner

Jungwon Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 32-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**FINAL ACTION**

1. Claims 32-42 are presented for examination.
2. The text of those sections of Title 35, U.S. Code not included in this office action can be found in a prior action.
3. Claims 32 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. (US 5,938,732).
4. As to claim 32, Lim et al. disclose the invention substantially as claimed, including the method for implementing a heartbeat protocol, comprising: sending, directly to one or more selected server, heartbeat messages from a single selected computer, indicating the availability of computer resources on one or more computers (col. 3, lines 30-37), such that the loss of a heartbeat from the selected machine is indicative that all computer resources are unavailable (col. 8, lines 23-35), and the presence of a heartbeat from the selected machine is indicative that all computer resources are available (col. 5, lines 66-67; col. 6, lines 1-6).
5. Lim et al. do not specifically disclose sending directly to one or more selected servers. However, Lim et al. disclose broadcast to servers (col. 5, lines 21-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made

to include sending directly to servers because it is well known in the art that broadcasting is defined as the sending of information directly from one specific computer within a network segment to other computer in that segment.

6. As to claims 35 and 36, Lim et al. disclose generating a message by the selected computer in accordance with the heartbeat protocol to indicate unavailability of the one or more computer resources (col. 8, lines 23-35).

7. As to claim 37, Lim et al. further disclose determining from the presence or absence of the heartbeat messages that all computer resources are available or unavailable (col. 8, lines 25-28); and providing a response to a message query for the computer resources for which the heartbeat is absent that the computer resources are unavailable (col. 8, lines 26-35).

8. As to claims 38-40, Lim et al. disclose providing additional information associated with the response to the message query concerning the computer resources (col. 5, lines 7-15).

9. As to claim 41, Lim et al. disclose the heartbeat is monitored by a primary master name server for a zone of a communications network comprising the computer resources (col. 6, lines 15-36).

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10. As to claim 42, Lim et al. disclose the heartbeat is generated by at least one computer within a domain name zone (col. 7, lines 24-37).

11. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. (US 5,938,732), as applied to claims 32 and 35-42 above, in view of Feit (US 6,178,439 B1).

12. As to claims 33 and 34, Lim et al. do not specifically disclose requesting a new heartbeat rate; and server imposing at any time a minimum heartbeat period on the selected computer.

13. However, Feit discloses the single selected computer requesting a new heartbeat rate, and upon agreement by the server to the new heartbeat, implementing the new heartbeat rate (col. 6, lines 44-67; col. 7, lines 55-65; col. 8, lines 7-9); and server imposing at any time a minimum heartbeat period on the selected computer (col. 7, lines 59-65).

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lim et al. and Feit because Feit's requesting and implementing the heartbeat rate would improve the performance of Lim et al's system by flexibly changing heartbeat rates, thereby server would request heartbeats more frequently to determine the availability of resources on computers.

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15. Applicant's arguments filed on 9/17/02 on claims 32-42 have been fully considered but they are not deemed to be persuasive.

16. In the remarks, the applicant argues in substance that:

(1) Applicant's invention allows direct transmission to the primary master DNS server rather than Lim's broadcast via a proxy address to all servers in the service group.

(2) The element in dependent claims 35 and 36 of "generating a message by the selected computer in accordance with the heartbeat protocol to indicate unavailability of the one or more computer resources" that refers to "the client to inform the server of scheduled or expected periods of unavailability".

(3) Applicant respectfully submits that Feit does not render Applicant's invention obvious because Feit's system of server-based control teaches away from and directly conflicts with Applicant's system of client-based control.

17. Examiner's respectfully traverses applicant's remarks:

As to point (1), the term "broadcasting" is defined as the sending of information directly from one specific computer within a network segment to other computer in that segment.

As to point (2), Applicant's argument is not found in the claims. Claimed subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11,15 (CCPA 1978). Furthermore, examiner cannot read the claim language as applicant's argument. The claim language is interpreted as "a message is generated only to indicate the unavailability of the computer resources".

As to point (3), Client and server are determined that which device requests a message to ask for some work to be done (i.e. client) and which device does the work and sends back the reply (i.e. server). Therefore, if a client provides information requested from server, the client stands as a server. Furthermore, the term "client" is not found in the claims. The claim language in the claims, a single selected computer, can be referred to either a "client" or "server".

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:00-5:30 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)308-9052. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Jungwon Chang  
November 5, 2002

  
ZARNI MAUNG  
PRIMARY EXAMINER